CLAIMS

1   1.   A method for processing a multidimensional array object
2   comprising array objects, said method comprising the steps of:

3   managing flags for said multidimensional array object,
4   said flags representing whether it is possible to optimize a
5   process for elements of said multidimensional array object;
6   and
7   executing a machine code corresponding to a state of said
8   flags.

2.   The method of claim 1, further comprising:

    inverting said flags when a predetermined condition is no
longer met.

3.   The method of claim 2, wherein said predetermined
condition is whether a base array of a multidimensional array
object is allocated to consecutive memory areas.

1   4.   The method of claim 2, wherein said machine code is either
2   a machine code optimized or a machine code not optimized
3   according to said predetermined condition.

1   5.   The method of claim 2, further comprising:
2   determining whether said predetermined condition is met
3   when writing to said multidimensional array object.

1   6.   The method of claim 2 wherein, further comprising:
2   if said predetermined condition is met when generating
3   said multidimensional array object, setting said flags to a
4   generated multidimensional array object.

1   7. The method of claim 1 wherein, further comprising:

2   if there is possibility of multi-thread processing of

3   said multidimensional array object, generating a machine code

4   for storing on a stack a dummy reference to said

5   multidimensional array during execution of an optimization

6   code.

1   8. A storage medium storing a program for a multidimensional

2   array object comprising array objects, wherein said program,

3   when read and executed by a computer, comprises steps of:

4   managing flags for said multidimensional array object,

5   said flags representing that it is possible to optimize a

6   process for elements of said multidimensional array object;

7   and

8   executing a machine code corresponding to a state of said

9   flags.

9. The storage medium of claim 8, further comprising:

        inverting said flags when a predetermined condition is no

longer met.

1   10. The storage medium of claim 9, wherein said predetermined

2   condition is whether a base array of a multidimensional array

3   object is allocated to consecutive memory areas.

1   11. The storage medium of claim 9, wherein said machine code

2   is either a machine code optimized or a machine code not

3   optimized according to said predetermined condition.

1   12. The storage medium of claim 9, further comprising:

2   determining whether said predetermined condition is met

3   when writing to said multidimensional array object.

1 13. The storage medium of claim 9, further comprising:
2   if said predetermined condition is met when generating
3 said multidimensional array object, setting said flags to a
4 generated multidimensional array object.

1 14. The storage medium of claim 8 wherein, further
2 comprising:
3   if there is possibility of multi-thread processing of
4 said multidimensional array object, generating a machine code
5 for storing on a stack a dummy reference to said
6 multidimensional array during execution of an optimization
7 code.

1 15. A computer for processing a multidimensional array object
2 comprising array objects, said computer comprising:
3   a central processing unit; and
4   a program, when read and executed by said central
5 processing unit, comprises steps of:
6   managing flags for said multidimensional array object,
7 said flags representing that it is possible to optimize a
8 process for elements of said multidimensional array object,
9 and
10   executing a machine code corresponding to a state of said
11 flags.

1 16. The computer of claim 15, wherein said program further
2 comprises:

3   inverting said flags when a predetermined condition is no
4 longer met.

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1 17.   The computer of claim 16, wherein said predetermined
2 condition is whether a base array of a multidimensional array
3 object is allocated to consecutive memory areas.

1 18.   The computer of claim 16, wherein said machine code is
2 either a machine code optimized or a machine code not
3 optimized according to said predetermined condition.

1 19.   The computer of claim 16, wherein said program further
2 comprises:
3 determining whether said predetermined condition is met
4 when writing to said multidimensional array object.

1 20.   The computer of claim 16, wherein said program further
2 comprises:
3 if said predetermined condition is met when generating
4 said multidimensional array object, setting said flags to a
5 generated multidimensional array object.

1 21.   The computer of claim 15 wherein, said program further
2 comprises:
3 if there is possibility of multi-thread processing of
4 said multidimensional array object, generating a machine code
5 for storing on a stack a dummy reference to said
6 multidimensional array during execution of an optimization
7 code.